GOVERNMENT OF INDIA
POWER
LOK SABHA

UNSTARRED QUESTION NO:3477
ANSWERED ON:07.09.2007
NATHPA JHAKHRI POWER PLANT
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Will the Minister of POWER be pleased to state:

(a) whether the Nathpa Jhakhri Hydel Power Plant has been halted due to silt deposit in the power house;

(b) if so, the details thereof along with the loss suffered by the Government therefrom; and

(c) the steps taken by the Government to remove the silt as early as possible?

Answer

MINISTER OF THE STATE IN THE MINISTRY OF POWER (SHRI SUSHILKUMAR SHINDE)

(a) & (b) : As per information available, the Nathpa Jhakhri Power Plant during the current year 2007-08 has been halted for 7.87 days on account of high silt in the river Satluj and for 1.44 days on account of periodic reservoir flushing. Whenever the silt concentration in the river water exceeds the permissible limit of 4000 Parts Per Million (PPM), the plant has to be shut down to avoid erosion to underwater parts of the turbine. A provision has, therefore, been made in the generation target in the Memorandum of Understanding for closure of plant upto 16 days in a year to accommodate the loss in generation due to excessive silt in river waters and also for reservoir flushing operations. Reservoir flushing is a technical requirement for sediment management. Had the plant been operational during these 9.31 days also, 330.15 Million Units of additional energy amounting to Rs. 77.67 crores could have been generated during this period.

(c) : The following steps have been taken by Satluj Jal Vidyut Nigam Limited(SJVNL) to deal with the heavy silt content in river Satluj:-

i) A comprehensive Catchment Area Treatment (CAT) Plan with a proposed outlay of Rs. 29.57 crores is being implemented by the State Forest Department. The period of implementation is 10 years w.e.f. 2002-03.

ii) SJVNL has carried out an extensive exercise and prepared a Detailed Report on bank protection and landslides protection works for an estimated cost of Rs. 94 crores to reduce the silt contents in the river. The report has been submitted to State Forest Department and Central Electricity Authority for their perusal and approval in November, 2006.

iii) For preparation of base line data / record of vulnerable area of Satluj Catchment, SJVNL has awarded a work on `Preparation of Comprehensive CAT Plan of Satluj basin (within Indian territory)` so that a detailed GIS and Remote Sensing map based vulnerable erosion prone areas, land slide prone areas, Nallahas, geological sensitive area etc. be identified for appropriate treatment as suggested. The Work is scheduled to be completed in October, 2007.

iv) Nallahs contributing high quartz laden silt in the river water upstream of the dam axis have been identified for treatment and are being treated.

v) The underwater turbine parts of the plant have been coated with Tungsten Carbide Coating by High Velocity Oxygen Fuel (HVOF) to improve abrasion resistance to silt.

vi) SJVNL is carrying out regular flushing of reservoir at Nathpa Dam to reduce the silt load.

vii) Dam height has been increased for increased pondage and settling of silt.